

APPENDIX 1

July 31, 2003

1. Appendix 1 - Region Specific Services - Technical Descriptions for Basic Serving Arrangements	3
Dedicated Digital (64 Kbps **)	3
Asynchronous Transfer Mode (ATM) Service (4031).....	4
ATM Cell Relay Service (8040).....	5
Dataphone Select-A-Station (8050).....	6
Digital Data Service 2-Wire (8042).....	7
Direct Current (MT3) (8051)	8
DSL Discrete Multitone Deluxe Light Service (8059)	9
Frame Relay Service (4027,5037,8039).....	10
McCulloh Loop (8052)	11
Qwest ISDL Service (8043).....	12
Qwest DSL Service (8041)	13
Modem Aggregation Service (8044).....	14
Remote Access Service (4033)	15
Trunk Side Access Facility (403).....	16
Video Dialtone Access Link (3010)	17
555 Access Service (8038)	18
2. Appendix 1 - Region Specific Services - Technical Descriptions for Circuit Switched Serving Arrangements.....	19
AIN Alternate Routing (4028).....	19
AIN Single Number Access (4030)	20
AIN Terminating Data Collection/Customized Routing (4029)	21
Automatic Disaster Recovery of DID (5010).....	22
Automatic Delivery (2019).....	23
Bridging - Line (5001).....	24
Call Denial On Line Or Hunt Group (6004)	25
Call Detail Recording Reports - via NXX Screening (8014)	26
Call Forwarding Originating (2003).....	27
Call Forwarding To Multiple Locations (6002).....	28
CFDA To DID Intraswitch (8022)	29
Call Queuing (8058)	30
Call Transfer On DID (3002,4026,8034)	31
Call Waiting (2005,3017,4018,5005)	32
Call Waiting With Forwarding Options (6001).....	34
Called/Calling Number Information - ANI (4005)	35
Calling Name Delivery (8045)	36
Calling Name Identification (8049).....	37
Coin Phone With Post Dialing Tone Capability **	38
Custom Service Areas (4006).....	39
Customer Changeable Number of Rings (2004**)	40
Cut Off On Disconnect **	41
Dial Call Waiting (8030)	42
Dialed Number Identification via INWATS to DID (4011,5015)	43
DID Load Across Wire Centers (5011).....	44
Directed Call Pickup With Barge-In (8033).....	45
Directed Call Pickup Without Barge-In (8032)	46
Distinctive Alert (8031).....	47
Easy Access (8054).....	48
Faster Signaling On DID **	49
Flexible ANI Information Digits **	50
Monthly Call Detail Recording (4023)	51
Multiplexing - T1 Transport - 1.544 Mbps - Line Side (8024)	52
Multiplexing - T1 Transport - 1.544 Mbps - Trunk Side (5013)	53
Name of Calling Party (formerly 4024) **	54
Number Forwarding (8055).....	55

Priority Installation Service (4013).....	56
Privacy + (8047).....	57
Redirecting Name Delivery (8046).....	58
Redirecting Number Delivery (8048).....	59
Remote Call Forwarding (3004,4019,5014,8025).....	60
Remote Call Forwarding On DID Lines (8057).....	61
Security Screen (8056)	62
Selective Call Acceptance (6003) *.....	63
Service Code Denial On Line Or Hunt Group (6005).....	64
Single Number Access For Multiple Locations (formerly 4025) **	65
Surrogate Client Number (4002).....	66
Switched 56 Kilobit Service (3019,4021,5036)	67
Third Number Billing Inhibited (4012,7067)	69
Three Way Calling (3020,4020,5019,8028).....	70
Traffic Data Reports (4016,5012,8016)	72
Transmission Improvement for Circuit Switched Services (8012).....	73
Uniform Access Numbers for Business Lines (4010)	74
3. Appendix 1 - Region Specific Services - Technical Descriptions for Packet Switched Access Arrangements.....	75
Abbreviated Call - Packet (8036).....	75
Default Window Size - Packet (5022,8007)	76
Flow Control Parameter Negotiation - Packet (8003).....	77
Incoming Calls Barred - Packet (5024,8001)	78
Logical Channels - Packet (8005).....	79
Logical Channel Layout - Packet (8004)	80
Menu Server - Packet (7000).....	81
Multiple Network Addresses/Port - Packet (3001,5027,8006)	82
Outgoing Calls Barred (5028,8002)	83
Permanent Virtual Circuit - Packet (5029,8008)	84
Reverse Charge Request Option (Packet) (5030,8009)	85
4. Appendix 1 - Region Specific Services - Technical Descriptions for Dedicated Access Arrangements	86
Access To Customer Premises Announcement (5035).....	86
Access To Order Entry System (4004).....	87
ADSL Service (4032)	88
DS0-B Subrate Multiplexing Service (4015)	89
High Capacity Digital Hand-Off Service (3026).....	90
Inband Signaling (3018).....	91
Line Monitor Service (3027).....	92
Multiplexing - Digital (2000,2001,2002,2018,3005,4007,5034,7034,8013)	93
Route Diversity **	95
User Initiated Diagnostics (4009)	96
Versanet (8053).....	97
5. Appendix 1 - Region Specific Services - Technical Descriptions for Dedicated Network Access Link Serving Arrangements.....	98
Expedited Testing Service *.....	98
Order Entry Service (8011).....	100
Initial Address Message (2006)	101
Coordinated Voice and Data Acceptance (2007)	103
Computer Assisted Dialing Acceptance (2010)	104
Computer Assisted Call Transfer Acceptance (2009)	105
Call Redirection Acceptance (2008).....	106
Video Dialtone Broadcast Service Channels (3011)	107
Video Dialtone Messaging Port (3013)	108
Video Dialtone Narrowcast Service Channels (3012).....	109

1. Appendix 1 - Region Specific Services - Technical Descriptions for Basic Serving Arrangements

Dedicated Digital (64 Kbps **)

**** NOTE** - this capability was moved to the main section of the ONA Services User Guide for the July 1993 update

Asynchronous Transfer Mode (ATM) Service (4031)

Asynchronous Transfer Mode (ATM) Service is a connection-oriented data transport service based on ATM cell-based switching technology.

ATM Service provides flexible connectivity using virtual connections implemented over digital facilities operating at transmission speeds of 1.536 Mbps, 44.210 Mbps, 149 760 Mbps or 599.040 Mbps. This service provides for the switching of symmetrical duplex transmissions of fixed-length ATM cells, utilizing virtual connections. As ATM is a connection-oriented service, to transfer information a virtual connection must be set up across the ATM network. ATM Service supports permanent virtual connections.

Information transmitted by ATM Service is segmented into fixed length cells, transported to and re-assembled at the destination. The ATM cell has a fixed length of 53 bytes. An ATM cell is broken into two main sections, the header and the payload. The payload is the portion that carries the actual information. The header is used for network functions such as addressing and error correction.

Generic Name of ONA Service	Product Name	
Asynchronous Transfer Mode (ATM) Service	BS – Asynchronous Transfer Mode	BSA

References.

- ATM Forum documents, "ATM User-Network Interface Specification" (Versions 3.0 and 3.1)
- BellSouth Technical Reference 73585, "Asynchronous Transfer Mode (ATM) Network Interface and Performance Specifications."

ATM Cell Relay Service (8040)

ATM Cell Relay Service (ATM CRS) is a connection-oriented communications service that uses Asynchronous Transfer Mode (ATM) technology. The service provides customers with high-speed, low-delay information transfer capacity, which supports applications that require near-real-time mixed media (data, video, image, voice) communications among multiple locations. ATM CRS supports transmission speeds of either up to 45 Mbps or up to 155 Mbps.

ATM CRS requires the use of customer terminal equipment that functions as a multiplexer/router/hub or ATM switch. This terminal equipment must be purchased separately from the ATM CRS and must conform to industry standards. The terminal equipment accumulates customer traffic and puts it into a cell relay format suitable for transmission over the ATM CRS Network.

ATM CRS conforms to industry standards and is only provided over fiber optic facilities. Technical Specifications for ATM CRS are delineated in Technical Publication PUB 77378 (Qwest).

Generic Name of ONA Service	Product Name	
ATM Cell Relay Service	Qwest - ATM Cell Relay Service	BSA

Dataphone Select-A-Station (8050)

Dataphone Select-A-Station ("DSAS") is a multi-station, voice grade, private line data service designed to establish point-to-point connections between an alarm monitoring service provider's monitoring center and a number of remote locations. This service permits the monitoring service provider's monitoring center to poll the remote locations of its end-user customers. DSAS is available on an interstate basis.

Generic Name of ONA Service	Product Name	BSE or CNS
Dataphone Select-A-Station	Qwest – Dataphone Select-A-Station *	BSA

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS.

- 1 This service is only available in selected existing locations that are capable of providing the service, because manufacturing of the equipment used to provision the service was discontinued by the equipment manufacturer in 1986

* The manufacturer of equipment used for this service stated that the equipment is no longer manufactured, and spare parts for equipment already in place are not available. There are no current customers for this service. A request with the FCC to remove this service from the ONA list is pending.

Digital Data Service 2-Wire (8042)

Digital Data Service 2-Wire (DDS 2-Wire) provides a two-wire, full duplex circuit, capable of transmitting digital data at 144 kbps. DDS 2-Wire consists of a 160 kbps channel for the transmission of 144 kbps serial or bi-directional data and a 16 kbps embedded, bi-directional, operations channel to support provisioning and maintenance operations, i.e., loopback testing and standard network management messages. When the customer's equipment provides access to the 16 kbps embedded channel, that bandwidth will be available for the customer to perform loopback testing and network management. This service is offered on a point-to-point basis only.

Generic Name of ONA Service	Product Name	
Digital Data Service 2-Wire	Qwest – Digital Data Service 2-Wire *	BSA

References:

- Qwest Corporation Technical Publication PUB 77399

* The manufacturer of equipment used for this service has discontinued business and the equipment is no longer manufactured for this service. There are no current customers for this service. A request with the FCC to remove this service from the ONA list is pending.

Direct Current (MT3) (8051)

Direct Current (MT3) is a low-speed data private line transport service for alarm applications. It is provided over metallic facilities on a two-point or a multi-point basis. MT3 is available on an interstate basis. It may also be available on an intrastate basis (consult the appropriate Tariff Reference data to determine exact state availability)

Generic Name of ONA Service	Product Name	BSE or CNS
Direct Current (MT3)	Qwest – Direct Current (MT3)	BSA

DSL Discrete Multitone Deluxe Light Service (8059)

Digital Subscriber Line (DSL) Discrete Multitone Deluxe Light Service utilizes Digital Subscriber Line (DSL) technology. It will be a dedicated 256 Kbps downstream and 128 Kbps to 256 Kbps upstream service.

Please refer to appropriate telephone company tariffs to determine availability and any service restrictions.

Generic Name of ONA Service	Product Name	
DSL Discrete Multitone Deluxe Light Service	Qwest – DSL Discrete Multitone Deluxe Light Service	BSA/BSE

References. not available

Frame Relay Service (4027,5037,8039)

This service provides fast packet transmission of customer data to and among Local Area Networks and host computers. Using statistical multiplexing, it allows customers to allocate circuit bandwidth to applications as needed and as available. Variable length frames are relayed from the source to the desired destination by means of virtual connections which are established at the time of subscription via Service Order.

This arrangement requires the use of separately purchased customer provided terminal equipment that functions as a multiplexer/bridge/router. The terminal equipment accumulates customer data and puts it into a frame relay format for transmission over the Frame Relay Network.

Generic Name of ONA Service	Product Name	
Frame Relay Service	BS - Exchange Access Frame Relay Service	BSA
	NX - Frame Relay Service	BSA
	Qwest - Frame Relay Service	BSA

References:

- TR-TSV-001369 Generic Requirements for Frame Relay PVC Exchange Service, Issue 1, May 1993
- TR-TSV-001370 Generic Requirements for Exchange Access Frame Relay PVC Service, Issue 1, May 1993

McCulloh Loop (8052)

McCulloh Loop (LS2) is a low-speed voice grade, private line data service for alarm applications at speeds of 0-30 baud or –150 baud. McCulloh bridging permits bridging for multi-point applications. The cable facility used must be a metallic cable pair. Up to twenty-six locations can be bridged on one circuit. LS2 is available on an interstate basis. It may also be available on an intrastate basis (consult the appropriate Tariff Reference data to determine exact state availability).

Generic Name of ONA Service	Product Name	BSE or CNS
McCulloh Loop (LS2)	Qwest – McCulloh Loop (LS2)	BSA

Qwest ISDL Service (8043)

Qwest ISDN Digital Subscriber Line ("Qwest ISDL") Service provides a data only, two-wire, private line service with a bi-directional data transmission capacity of 128 kbps or 144 kbps. Each Qwest ISDL must be connected to a Qwest DSL Host Service. Qwest ISDL provides the teleworker with a link/access to the end user's business local area network, enabling work-based activities, such as work-at-home capabilities and access to Internet service providers. Qwest ISDL is only available on an interstate basis.

Generic Name of ONA Service	Product Name	BSE or CNS
Qwest ISDL Service	Qwest – Qwest ISDL Service *	BSA

* This service will be discontinued upon grant of a pending petition at the FCC. Existing customers will be grandfathered.

Qwest DSL Service (8041)

Qwest DSL Service utilizes Digital Subscriber Line (DSL) technology to provide customers with both voice and high-speed data services over metallic local loop facilities. This service allows the Company to accept traffic from the customer and separate the voice from the data, sending each type of traffic to the appropriate, separate network.

Qwest DSL Service allows the end user to transmit data at peak bandwidths ranging from 256 kbps to 7 Mbps. Multiple end users' data transmissions are aggregated onto a central office hub transmitting at peak bandwidths of 1.544 Mbps, or 3 Mbps up to 45 Mbps (in 3 Mbps increments)

Generic Name of ONA Service	Product Name	
Qwest DSL Service	Qwest – Qwest DSL Host Service	BSA/BSE
	Qwest – Qwest DSL Service	CNS

References: Technical specifications for Qwest DSL Service are delineated in Qwest Technical Specification Paper #60000-006 CAP RADSL (Netspeed)

Modem Aggregation Service (8044)

Modem Aggregation Service ("MAS") provides ESPs the ability to use Telephone Company-provided modems that are located in the Telephone Company central offices. MAS provides a dial-in number and a specified number of modems (in groups of ten), which the ESP can make available to their end users in order to provide dial-in access to the ESP's data network. End-user calls in excess of the subscribed-to number of modems will receive a subscriber busy signal. Connectivity between the modems and the customer's network is provided via standard Frame Relay Service ("FRS") or ATM Cell Relay Service ("CRS"). MAS requires the use of customer-provided equipment, located at the ESP's location, to interface with the end-user modem traffic that is being delivered over the FRS or ATM CRS to the ESP location. MAS is only available on an interstate basis.

Generic Name of ONA Service	Product Name	BSE or CNS
Modem Aggregation Service	Qwest – Modem Aggregation Service	BSA

Remote Access Service (4033)

Remote Access Service is a customer-controlled service that supports a dedicated, customer selected remote access server with backup dial-in capability for network management. Remote Access Service provides one-way ports for the collection, concentration, signaling and aggregation of an information service provider's (ISP's) dial-up data traffic into a hub site. This option will allow an ISP's end-user customer to call into a remote access server. Remote Access Service is available on an interstate and intrastate basis.

Generic Name of ONA Service	Product Name	BSE or CNS
Remote Access Service	BS – BellSouth Remote Access Service	BSA

Trunk Side Access Facility (4003)

This capability provides a trunk side connection from a Traffic Operator Position System (TOPS) Tandem switch to an ESP's premises. This connection will be a dedicated one way trunk group from each of the TOPS Tandem switches serving the end offices the ESP wishes to receive traffic from. This trunk group is designed to deliver the called number (UAN) and calling line ANI from the TOPS Tandem switch to the ESP. Feature Group D-like signaling will be used to communicate with the ESP's CPE

This capability will only be available in the General Subscribers Services Tariff and only in conjunction with Uniform Access Number

Generic Name of ONA Service	Product Name	
Trunk Side Access Facility	BS - Trunk Side Access Facility	BSA

References not available

Video Dialtone Access Link (3010)

A Video Dialtone Service that provides for the transport of video and other programming signals

Generic Name of ONA Service	Product Name	
Video Dialtone Access Link	BA - VDT - Access Link	BSA

FEATURE OPERATION

Video Dialtone Direct Access Link provides a connection from the Programmer-Customer's designated location to a Telephone Company Video Distribution Office and is capable of transporting up to a maximum of ninety-six (96) 6 megabyte/sec MPEG2 [MPEG - Motion Picture Experts Group] digital signals. Video Dialtone Access Links are one-way, from the Programmer-Customer to the Video Dialtone Distribution Office, and require that the Programmer-Customer meet the interface specifications found in Bell Atlantic Technical Publication TR-72550.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

For interface publications, see Bell Atlantic Technical Publications TR-72550 and TR-72211.

Also see BroadBand Technologies Technical Publication TESP-0106. Contact information for BroadBand Technologies, Inc.:

BroadBand Technologies, Inc
 Suite 150, Triangle Business Center
 4024 Strup Creek Drive
 Durham, NC 27703
 Post Office Box 13737
 Research Triangle Park, NC 27709-3737
 Telephone 919 544-0015
 Fax 919 544-5356

This service is offered where available and facilities permit.

555 Access Service (8038)

This service provides access to ESPs by their clients using a 555-XXXX telephone number. The service enables the ESP to have a uniform, LATA-wide, 10 digit (NPA-555-XXXX) telephone number. The same 555 number could be used in multiple LATAs where service is available.

Generic Name of ONA Service	Product Name	BSE or CNS
555 Access Service	Qwest - 555 Access Service	BSA

FEATURE OPERATION

1. When a caller dials the unique 555 telephone number (1-NPA-555-XXXX) within a LATA, the call is routed to the caller's originating end office and then to the associated Traffic Operator Position Switch (TOPS) that serves the end office.
2. At the TOPS tandem the 555 call is translated into a unique 800 NXX-XXXX telephone number which is associated with each 555 telephone number or group of 555 telephone numbers. (The 800 telephone number is obtained by the 555 service subscriber.) [Note: 888, 877, 866, and 855 are now equivalent to 800.]
3. After the call is translated into an 800 telephone number, the 800 database is queried to identify the 555 Service subscriber's call routing instructions.
4. The 555 call is then routed in the standard Feature Group D format which includes the calling number, the called number (800 telephone number) and Automated Number Identification (ANI) information digits. ANI information digits are the digits that precede the calling number on the ANI record. ANI information digits inform the 555 Service subscriber of the calling party's class of service for billing, routing and other special handling purposes.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. The calling party, the TOPS tandem and the 555 subscriber's routing point must be in the same LATA. The routing point can be either the 555 subscriber's location or to their carrier of choice. In LATAs where more than one TOPS tandem is present, the 555 Service subscriber must subscribe to 555 Service from both TOPS tandems.
2. Calls from outside the LATA will be blocked. Blocking also applies to "0 minus" (e.g., for the hearing impaired, etc.), "0+" calls, and restricted classes of service.
3. This capability is currently available only from suitably equipped DMS-200 Traffic Operator Position Switches.